

# RECLAMATION

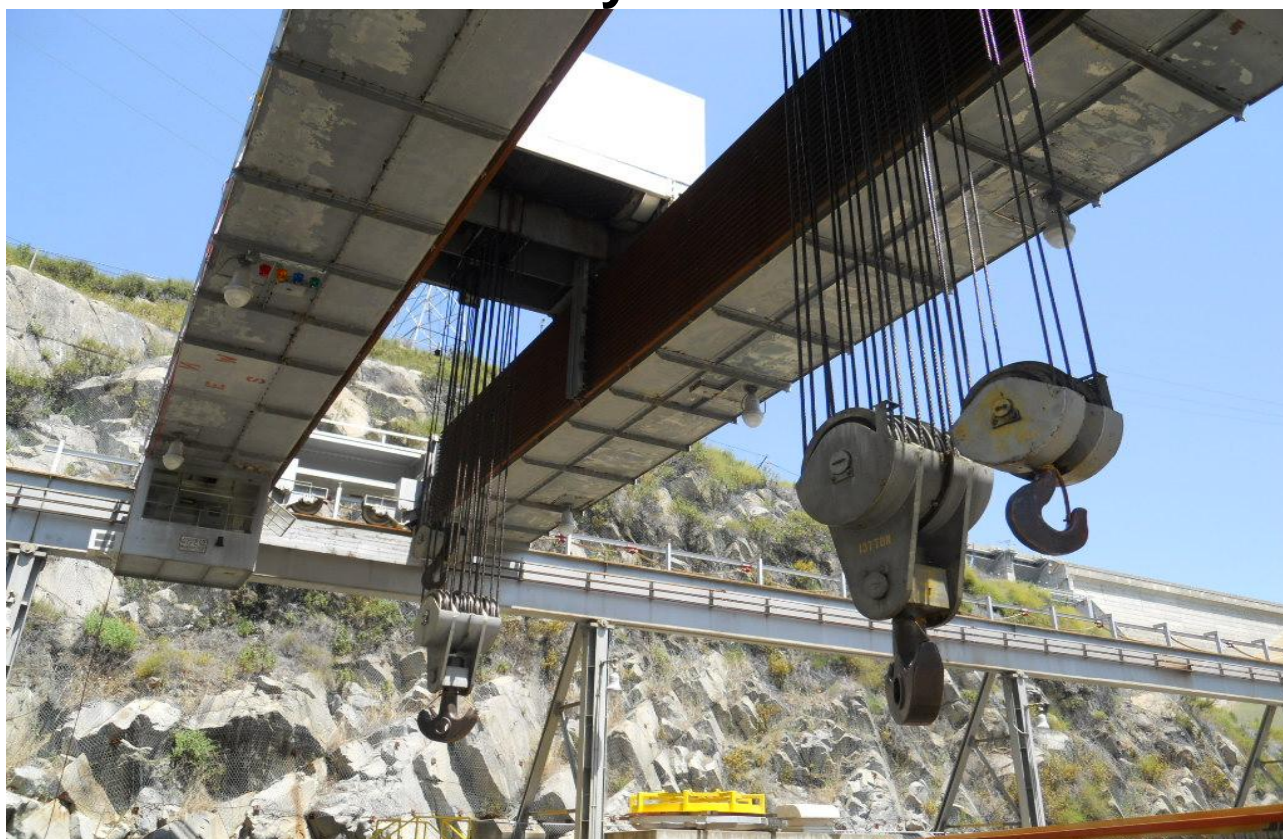
*Managing Water in the West*

## MP CONSTRUCTION OFFICE

Willows, California

Construction Progress Report – L29

May 2012



View of the new wire ropes installed on the bridge crane. This picture also shows the hooks re-installed on the bridge crane.

**"Doing It Right from the Start"**



U.S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region

CONSTRUCTION PROGRESS REPORT (L-29)  
MP CONSTRUCTION OFFICE  
MID-PACIFIC REGION  
May 2012

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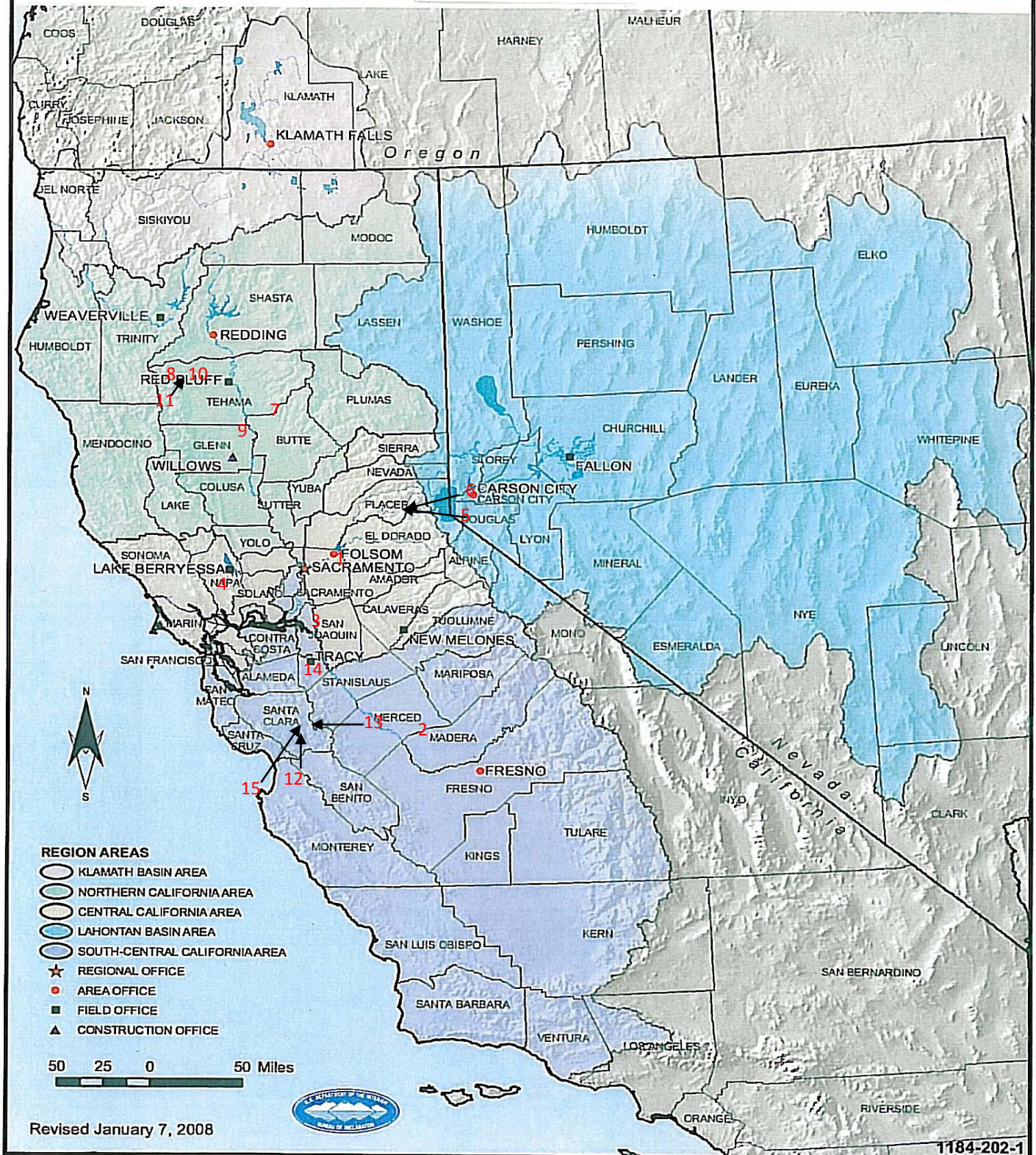
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# Mid-Pacific Region

**RECLAMATION**  
Managing Water in the West



## **STAFFING – MID PACIFIC CONSTRUCTION OFFICE**

The Mid Pacific Construction Office had 82 construction and administrative employees at the close of this month as follows:

Construction Engineer's Office	2
Preaward & Project Management Group	4
Administrative Management	11
Division of Field Engineering	33
Division of Office Engineering	13
Materials Lab Branch	11
Detail/Contract Employees	8

## **GLOSSARY OF ACRONYMS AND ABBREVIATIONS**

### **MEANING**

ARRA	American Recovery and Reinvestment Act
CCAO	Central California Area Office
CVP	Central Valley Project
LBAO	Lahontan Basin Area Office
MP	Mid Pacific Regional Office
MPCO	Mid-Pacific Construction Office
NCAO	Northern California Area Office
SCCAO	South Central California Area Office
TO	Tracy Office





CCAO

Contract No. R10PC20197

Specification No. 20-C0768

Control Upgrade and Modernization of the Gantry and Bridge Cranes at the Folsom Dam and Powerplant–American River Division, Folsom Unit, Central Valley Project, California  
Crane America Services, Inc., Livermore, CA

Work Performed:	May	0%
	Time Elapsed	87.0%
	Work Completed	80.3%
Contractor Earnings:	May	\$0
	Previous	\$1,524,935.17
	Total to Date	\$1,524,935.17

Area Office Project Management

Project Manager: Brian Zewe, CC-607A

Office Engineering

Contract Administrator: Madelyn Giles, MPCO-210

No invoices were received this period.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Todd Dooley, MPCO-314

Number of Contract Employees: 8

Work performed:

Wire up electrical system:

Crane America finished terminating and labeling the existing lighting and power (receptacles) circuits in the existing lighting and power panel in the cab of the crane.

Crane America installed the encoder cables from the main and auxiliary hoist motors to the variable frequency drive cabinet.

Crane America installed the new 400-amp main breaker in the cab of the bridge crane.

After the final terminations and inspections, Crane America energized the 275-ton bridge crane.

Crane America tuned the upstream and downstream main and auxiliary hoist and bridge motors, and then coupled the hoist motors with the shaft of the gear case.

Crane America permanently installed the antenna for the wireless radio control station.

Install limit switch on cable reel on 140-ton gantry crane:

Crane America installed the chain around the sprocket system and started installation of the control wiring from the cord reel assembly to the cab of the gantry crane.

Install trolley equipment enclosure:

This month the second trolley equipment enclosure was delivered to the site.

Crane America set and began permanently securing the upstream and downstream trolley equipment enclosures on the 275-ton bridge crane, but had subcontractor, AAA Services Pleasanton Steel, remove the upstream trolley enclosure to repair an alignment problem.

Install festoon systems:

Crane America completed the trolley festoon system this month.

Crane America removed the existing bridge festoon system from the bridge crane and installed the new bridge festoon system. Crane America will replace one of the festoon cables because it is too short.

Install wire rope:

Crane America completed the wire rope change-out.

Handrail installation on 140-ton gantry crane

Subcontractor, Blue Water Services, stripped lead based paint from the designated areas on the 25-ton hoist deck.



Contract No. R10PC20196

Specification No. 20-C0769

Control Upgrade and Modernization of the Gantry Crane at Nimbus Powerplant–American River

Division, Folsom Unit, Central Valley Project, California

Crane America Services, Inc., Livermore, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	88.8%
Contractor Earnings:	May	\$0
	Previous	\$456,650.16
	Total to Date	\$456,650.16

Area Office Project Management

Project Manager: Brian Zewe, CC-607A

Office Engineering

Contract Administrator: Madelyn Giles, MPCO-210

No invoices were received this period. The next invoice will be the final invoice.

The substantial completion date was June 23, 2011.

The only contract work remaining is for the contractor to submit final data.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Todd Dooley, MPCO-314

Number of Contract Employees:

Work performed: 0

Site work was completed in June 2011.

Contract No. R10PC20R15

Specification No. 20-C0649A

Fixed Wheel Gate Rehabilitation–Folsom Dam River Division–Central Valley Project,  
California

Abide International, Inc., Sonoma, CA

Work Performed:	May	0%
	Time Elapsed	60.2%
	Work Completed	30.9%
Contractor Earnings:	May	\$0
	Previous	\$2,529,703.18
	Total to Date	\$2,529,703.18

Area Office Project Management

Project Manager: Jesse Castro, CC-607

Office Engineering

Contract Administrator: Larry Bowman, MPCO-240

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Bill Linder, MPCO-312

Number of Contract Employees: 2

Work performed:

Abide International representatives Craig Woosley and Karl Lindstrom were present at the jobsite Monday, May 7, 2012, from 0800 to 1530 hours.

Jesse Castro with CCAO, and the Abide representatives, entered the penstock for Unit number three. They went in through the access hatch located two thirds of the way up in the upstream direction of the penstock, and walked up to the Actual Fixed Wheel Gate. They performed a visual inspection of the gate which will be beneficial for their upcoming work.

With this inspection, Abide International formerly finishes their activities for the Fixed Wheel Gate contract. They will be gone until October 1, 2012, when they will resume their work for this contract.



Photo shows Craig Woosley from Abide International going into the penstock on Unit #3 for the visual inspection of the Fixed Wheel Gate.

Contract No. R10PC20859

Specification No. None

Folsom Dam and Powerplant Site Security System – Central Valley Project, California

Troholz Technologies, Inc., Rocklin, CA

Work Performed:	May	0%
	Time Elapsed	90.4%
	Work Completed	87.1%

Contractor Earnings:	May	\$0
	Previous	\$5,253,426.44
	Total to Date	\$5,546,053.56

Area Office Project Management

Project Manager: Bill Vanderwaal, MPCO-122

Invoice 29 was received and forwarded to the Denver finance office for processing. It was not for work done this period but for work done through April 26, 2012.

Office Engineering

Contract Administrator: Kevin Jacobs, MPCO-214

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Juan Espinosa

Number of Contract Employees: 7

Work Performed:

The contractor and subcontractor, Harold E. Nutter and son, Inc., continued installation of the Microwave Sensors. They installed the bi-static transmitters, mono-static sensors, and motion sensors at the North Fork pipeline.

Administration Building and Back up Control Center:

The contractor's technicians continued to program and test the access control system and troubleshoot the intrusion detection system.

Modification 3, Folsom Perimeter Gate:

Subcontractor, Crusader Fence, completed installation of the perimeter gate to the Folsom Dam roadway.

Other:

The contractor continued programming, troubleshooting, and performing operational checks on the security system software.



Contract No. R10PC20R57

Specification No. 20-C0760

Folsom Dam Civil Maintenance Building–American River Division–Folsom Unit, Central Valley Project, California

Building Solutions, Inc., Reno, NV

Work Performed:	May	6.8%
	Time Elapsed	94.2%
	Work Completed	79.97%
Contractor Earnings:	May	\$459,299.28
	Previous	\$4,920,858.06
	Total to Date	\$5,380,157.34

Area Office Project Management

Project Manager: Ed Roza, CC-608

Office Engineering

Contract Administrator: Laurie Larson, MPCO-222

Invoice 5 was received and forwarded to the Denver finance office for processing.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Michael E. Manlick, MPCO-313

Number of Contract Employees: 31

Work performed:

Building Solutions Inc. applied floor hardener to several rooms within the building. They also installed wall flashing for the seismic joint on the north side of Quad A. They also installed Dektite flexible boot flashings over the roof.

Takahara completed the installation of the irrigation system. They also completed planting within each of the nine zones.

Rex Moore installed strut, rigid metal conduit, roll-up-door operators, light fixtures and receptacles. They pulled wire to equipment, receptacles and fixtures throughout the building. They also installed pull-tape from the 500KVA transformer to electrical vault EM-8H.

Lancaster Burns installed steel frames for each of the eleven roll-up garage doors. They completed the installation of the decorative grilles around the two entry columns. They also installed sheetrock and began taping and topping sheetrock throughout the building.

Solo Steel Erectors and Miles Construction completed the installation of wall and roof panels. They also partially completed the installation of exterior soffit panels, roof rakes and roof gutters.

American Mezzanine Fabrication and Installation (AMFI) corrected Mezzanine installation deficiencies.

Accent Windows installed clerestory windows and applied interior glazing to interior office windows. They also installed exterior baffles for aluminum windows in Quad A.

Iron Mechanical installed Freon lines for A/C compressors. They installed wall heat pumps in both the garage office and the paint shop office. They installed fan coil units and associated ductwork within Quad A. They installed piping and fittings associated with the car wash recycler system. They ran the copper water line and PVC vent piping for the welder's sink in Quad B. They also began assembling the air line system throughout the building.

Foothill Fire Protection installed both a seismic fitting and dry valves for the fire suppression system.

Flexible Lifeline Systems installed the fall-restraint safety systems across the roofs of the four Quads.

J. L. Harris Painting completed priming bathroom and locker room walls in Quad A. They also brushed coats of PPG Pitt-The Plus DTM to fire suppression piping.

California Tile completed ceramic tile installation within the men's locker room and the men's bathroom. They began installing tile within women's bathroom.

Contract No. R10PC20114

Specification No. 20-C0754

Folsom Dam–Safety of Dams Modification–MIAD Key-Block–American River Division,

Folsom Unit, Central Valley Project, California

Shimmick Construction Co., Inc., Sacramento, CA

Work Performed:	May	5.6%
	Time Elapsed	62.8%
	Work Completed	77.4%
Contractor Earnings:	May	\$2,156,240.37
	Previous	\$33,419,811.00
	Total to Date	\$35,576,051.37

Area Office Project Management

Project Manager: Larry Hobbs, CC-106

Office Engineering

Contract Administrator: Larry Bowman, MPCO-240

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Howard Diedrich, MPCO-316, Sean Frische, MPCO-317

Number of Contract Employees: 64

Work performed:

CELL E:

Shimmick Construction Co., Inc. completed excavation from level 2 to level 4; installed bracing levels 2, 3, and 4 and began excavation down to level 5.

CELL A:

Shimmick Construction Co., Inc. completed excavation from level 1 to level 4 and installed bracing levels 2, 3, and 4.

CELL C:

Subcontractor MDCI completed drilling for and installing all secant piles for this cell. Concrete for the secant piles was batched and placed by subcontractor CEMEX.

DISPOSAL OF EXCAVATED MATERIALS:

Drilling spoils and excavated materials were hauled to the designated stockpile area along the toe of the CSAMIAD stockpile by owner-operator dump trucks and Shimmick Construction Co., Inc. haul trucks.

MODIFICATION 005:

Shimmick Construction Co., Inc. completed welding the six inch supplemental dewatering pipe to the structural secant pile I-beams.

Bracing level 6, Group 2 remains incomplete. One pipe strut is not onsite and the pipe strut connection plates have not been attached.

Shimmick Construction Co., Inc. repaired the pond liner at the discharge point into the primary settling pond.

MODIFICATION 007:

Shimmick Construction Co., Inc. continued operating and adjusting the supplemental dewatering systems for Cells A and E, while consultant HSI continued monitoring and recording data from the supplemental dewatering system for the two cells.

Shimmick Construction Co., Inc. completed installing the pipe extensions for the Cell F supplemental dewatering wells and began installing the pipe extensions for Cell C in preparation of the six inch well drilling.

Shimmick Construction Co., Inc. and subcontractor MDCI began and completed supplemental dewatering well drilling and flushing in Cell F. Consultant HSI began pump and recovery tests on the supplemental dewatering wells in Cell F.

Shimmick Construction Co., Inc. and subcontractor MDCI began supplemental dewatering well drilling and flushing in Cell C.

Shimmick Construction Co., Inc. replaced cartridge filters for arsenic filtration equipment weekly, on average.

MISCELLANEOUS:

Subcontractor MDCI began and completed demobilization of their major equipment (drill rigs, crane) used on contract work. One small drill rig remains onsite to complete supplemental dewatering well drilling.



Contract No. R10PC20R24

Specification No. 20-C0751

Folsom Dam, Safety of Dams Modifications, Spillway Piers and Gates–American River

Division–Folsom Unit, Central Valley Project, California

Kiewit Infrastructure West Co., Folsom, CA

Work Performed:	May	0%
	Time Elapsed	70.6%
	Work Completed	99.3%
Contractor Earnings:	May	\$0
	Previous	\$17,257,442.11
	Total to Date	\$17,257,442.11

Area Office Project Management

Project Manager: Larry Hobbs, CC-106

Office Engineering

Contract Administrator: Casandra Arthur, MPCO-245, is handling some of the duties.

No invoices were received this period.

The substantially complete date is December 12, 2011.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Howard Diedrich, MPCO-316

Number of Contract Employees: 0

Work performed:

No site work was performed because the contractor completed all site work including punch list items.

Contract No. R10PC20767

Specification No. 20-C0703

Folsom Power Plant U1, U2, and U3 Replacement Runners–American River Division–Folsom  
Unit–Central Valley Project, California

Voith Siemens Hydro Power Generation, Inc., York, PA

Work Performed:	May	0%
	Time Elapsed	80.5%
	Work Completed	73.0%
Contractor Earnings:	May	\$0
	Previous	\$5,249,193.78
	Total to Date	\$5,249,193.78

Area Office Project Management

Project Manager: Jesse Castro, CC-607

Office Engineering

Contract Administrator: Madelyn Giles, MPCO-210

No invoices were received this period.

Field Engineering

Construction Manager: N/A supply contract

Construction Representative: N/A supply contract

Number of Contract Employees: N/A supply contract

Work performed: N/A supply contract

Contract No. R10PC20019

Specification No. 20-C0689

Folsom Power Plant Generators U1, U2, and U3 Rewind and Excitation System Replacement–

American River Division–Folsom Unit–Central Valley Project, California

Andritz Hydro Corp, Charlotte, NC

Work Performed:	May	20.6%
	Time Elapsed	49.6%
	Work Completed	52.9%

Contractor Earnings:	May	\$4,009,271.17
	Previous	\$6,271,961.77
	Total to Date	\$10,281,232.94

Area Office Project Management

Project Manager: Jesse Castro, CC-607

Office Engineering

Contract Administrator: Madelyn Giles, MPCO-210

Invoice 5 was received, approved and forwarded to Denver, Colorado, this report period.

MPCO reviewed proposals for Modifications 6 and 7 which will definitize modifications 1 and 2. The review was not completed this period.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Sergio Vivar, MPCO-311, Sean Frische, MPCO-317

Number of Contract Employees: 0

Work performed:

No work was performed. The contractor demobilized on October 28, and per the schedule will remobilize in October 2012.

Contract No. R10PC20R49

Specification No. 20-C0733

Lake Berryessa ADA Accessibility Improvements–ARRA Project No. 49.000–Lake Berryessa  
Recreational Area, Solano Project, California CSRW (DBA)

CSRW, Inc. (DBA) Allied Construction Services, Livermore, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	96.3%

Contractor Earnings:	May	\$0
	Previous	\$1,009,249.48
	Total to Date	\$1,009,249.48

Area Office Project Management

Project Manager: Nicole Johnson, CC-605c

Office Engineering

Contract Administrator: Amber Pierce, MPCO-205

No invoices were received this period.

A final modification will be negotiated to incorporate differing quantities, some of which are over and some under 15 percent of the contract line item amounts.

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: John Lakovich, MPCO-344

Number of Contract Employees: 0

Work performed: Site work was completed in September 2011.



Contract No. R10PC20R37

Specification No. 20-C0738

New Melones ADA Accessibility–ARRA Project No. 50.000–New Melones Recreation Area,  
East Side Division–Central Valley Project, California

J.I. Garcia Construction, Inc., Fresno, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	96.5%
Contractor Earnings:	May	\$0
	Previous	\$1,333,872.80
	Total to Date	\$1,333,872.80

Area Office Project Management

Project Manager: Nicole Johnson, CC-605c

Office Engineering

Contract Administrator: Amber Pierce, MPCO-205

No invoices were received this period.

The contractor has to complete the final submittals.

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: John Lakovich, MPCO-344

Number of Contract Employees: 0

Work performed:

The only remaining work is to resolve punch list items.



Subcontractor, Scott's Seal Coating and Paving, removing the asphalt at Acorn registration parking stalls (punch list item)  
New Melones ADA Accessibility

Contract No. R10PC20128

Specification No. 20-C0706

New Melones Power Plant Excitation System Replacement–East Side Division–New Melones

Unit–Central Valley Project, California

Koontz Electric Company, Inc., Morrilton, AR

Work Performed:	May	3.4%
	Time Elapsed	79.8%
	Work Completed	98.5%
Contractor Earnings:	May	\$81,180.00
	Previous	\$2,291,276.50
	Total to Date	\$2,372,456.50

Area Office Project Management

Project Manager: Terry Brown, CC-606a

Office Engineering

Contract Administrator: Larry Bowman, MPCO-240

Invoice 9 was received and forwarded to the Denver finance office for processing.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Dennis Schuenemann, MPCO-338

Number of Contract Employees: 5

Work performed:

Prime contractor Koontz Electric Co. Inc. performed the following:

- Contractor performed and completed Unit 2 wiring checkout and testing.
- Removed all waste and debris from the site.
- Demobilized all equipment and the dumpster from the site.
- Performed wiring changes and revisions to drawing.
- Replaced defective components and made adjustments.
- Performed nine (9) tests on PTs and CTs:
- Gathered and captured data.
- Found and corrected all technical and /or electrical issues that arose during the testing.
- Provided overall assistance and expertise of the new product.
- Installed necessary revised software for both units.
- Removed the existing potential transformers (PT) for all three phases under new unit 1 clearance.
- Installed the new unit 1 PT(s) for all three phases.
- Demobilized from the site today on Thursday , May 24, 2012.

The contractor has completed all physical work on Unit 1 and Unit 2. Both new exciter cabinets are installed and are operational as of May 23, 2012. There are a few outstanding items remaining prior to completing the terms of the contract.

1. The “Shunt Trip Coil” or “Xener Diode” located on the AC breaker inside exciter cabinet 2SX1F has to be replaced when the correct one arrives at New Melones Power Plant via the sub contractor (Emerson Process Management). Technician will install replacement at that time. Once this coil is replaced, the L.E.D. lamp located on Excitation Supply Breaker designated 252 ECS in the control room on panel SC1 will function as intended. Apparently the L.E.D. lamp required approximately twice the amperage as the incandescent lamp does. Currently the incandescent lamp is being used until the coil can be replaced. No firm delivery and installation date has been given yet.
2. Exciter training is still outstanding; this is scheduled June 19 - 21, 2012.
3. The spare CPU to the redundant or primary backup software in micro processor needs to be delivered to NMPP. This will be finished after all software changes are agreed upon between NMPP, CCAO and TSC directed Emerson Process Management as to what the government wants, this will be done after commissioning. No firm delivery and installation date has been given yet.
4. As-Built drawing revisions and other outstanding RSNs..

Contract No. R09PC20171  
Specification No. 20-C0720  
Nimbus Powerplant HVAC System Modification–American River Division–Folsom Unit,  
Central Valley Project, California  
Perryman Mechanical, Inc., West Sacramento, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	79.9%
Contractor Earnings:	May	\$0
	Previous	\$428,963.09
	Total to Date	\$428,963.09

Area Office Project Management  
Brian Zewe, CC-607A

Office Engineering  
Contract Administrator: Ryan Hennigan, MPCO-211

No invoices were received this period.

Field Engineering  
Construction Manager: Steve Holmes, MPCO-320  
Construction Representative: Frank Medberry, MPCO-341

Number of Contract Employees: 0

Work performed: No work was performed. There are punch list items to complete.

# LBAO

Contract No. R11PC20158

Specification No. 20-C0777

Stampede Powerplant and Switchyard Recoatings–Stampede Dam–Stampede Division–California

Farr Construction Corporation, Sparks, NV

Work Performed:	May	0%
	Time Elapsed	76.7%
	Work Completed	0%
Contractor Earnings:	May	\$0
	Previous	\$0
	Total to Date	\$0

Area Office Project Management

Project Manager: Locke Hahne, LO-400

Office Engineering

Contract Administrator: Amber Pierce, MPCO-205

No invoices were received this period.

Field Engineering

Construction Manager: Reynaldo Garcia, MPCO-310

Construction Representative: Mike Rondoni, MPCO-319

Number of Contract Employees: 0

Work performed: No work was performed because it requires warmer weather (summertime).  
The contractor plans site work in July 2012.

# NCAO



Contract No. R10PC20025

Specification No. None

Coleman Fish Hatchery Water Intakes Vegetation Replacement and Monitoring–Shasta

Division–Central Valley Project, California

Tehama Environmental Solutions, Inc., Red Bluff, CA

Work Performed:	May	0%
	Time Elapsed	32.5%
	Work Completed	86.6%
Contractor Earnings:	May	\$0
	Previous	\$606,142.55
	Total to Date	\$613,279.87

Area Office Project Management

Project Manager: Hank Herrington, NC-210

Invoice 14 was received and forwarded the Denver finance office for processing. It was not for work done this period but for work done through April 30, 2012.

Office Engineering

Contract Administrator: Jacquelyn Olds, MPCO-202

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: Daniel Pavone, MPCO-333

Number of Contract Employees: 0

Work performed:

The contractor's current activity consists of maintaining vegetation planted in 2010.

Contract No. R11PC20124  
Specification No. 20-C0780  
Coleman National Fish Hatchery Barrier Weir Site Modifications–Shasta Division–Central  
Valley Project, California  
Contractor Services Group, Inc., West Sacramento, CA

Work Performed:	May	0%
	Time Elapsed	65.8%
	Work Completed	5.5%
Contractor Earnings:	May	\$0
	Previous	\$28,578.16
	Total to Date	\$49,215.61

Area Office Project Manager  
Jim Goodwin, MP-200

Office Engineering  
Contract Administrator: Ryan Hennigan, MPCO-211

Invoice 3 was received and forwarded to the Denver finance office for processing. It was not for work done this period but for work done through April 30, 2012.

Notice to proceed was issued October 13, 2011.

Field Engineering  
Construction Manager: Randy Wyatt, MPCO-305  
Construction Representative: Fernando Pavone, MPCO-333

Number of Contract Employees: 0

Work performed:  
Site work has not begun and will begin in June 2012.

Contract No. R10PC20746

Specification No. 20-C0700

Coleman National Fish Hatchery Water Intakes Rehabilitation–Shasta Division–Central Valley  
Project, California

Shimmick Construction, Inc., Sacramento, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	97.8%
Contractor Earnings:	May	\$0
	Previous	\$7,915,099.25
	Total to Date	\$7,915,099.25

Area Office Project Management

Project Manager: Hank Herrington, NC-210

Office Engineering

Contract Administrator: Kevin Jacobs, MPCO-214

No invoices were received this period.

The contractor has only to complete final submittals.

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: Daniel Pavone, MPCO-333

Number of Contract Employees: 0

Work performed:

Site work is completed.

Contract No. R09PC20126

Specification No. 20-C0727

J.F. Carr Penstock Relining–NCAO, Shasta Power Plant–Sacramento River Division–Central Valley Project, California

Extreme Coatings, Inc., Pasco, WA

Work Performed	May	2.9%
	Time Elapsed	100%
	Work Completed	99.96%
Contractor Earnings	May	\$87,292.36
	Previous	\$2,871,774.61
	Total to Date	\$2,959,066.97

Area Office Project Management

Program Manager: George Girgis

Office Engineering

Contract Administrator: Kevin Jacobs

Invoice 6 was received and forwarded to the Denver finance office for processing.

The only contract requirements the contractor has to complete are final submittals.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: Frank Medberry, MPCO-341

Number of Contract Employees: 0

Work performed:

Site work was completed in April 2012.

Contract No. R10PC20744

Specification No. 20-C0712

J.F. Carr Power Plant, Generator G1 and G2 Rewinds–NCAO–Shasta Power Plant–Sacramento

River Division–Central Valley Project California

National Electric Coil, Inc., Columbus, OH

Work Performed	May	0%
	Time Elapsed	100%
	Work Completed	79.2%
Contractor Earnings	May	\$0
	Previous	\$14,669,951.25
	Total to Date	\$14,669,951.25

Area Office Project Management

Program Manager: John Dotter, NC-261

Office Engineering

Contract Administrator: Kevin Jacobs, MPCO-214

No invoices were received this period.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: Frank Medberry, MPCO-341

Number of Contract Employees: 0

Worked Performed:

No work was performed this period.

This will be the last report for this contract until the rotor balancing and commissioning work resumes.

Contract No. R11PC20235

Specification No. None

Red Bluff Diversion Dam, Fish Passage Improvement Project, Terrestrial Mitigation–  
Sacramento Canal Units–Sacramento River Division–Central Valley Project, California  
Tehama Environmental Solutions, Inc., Red Bluff, CA

Work Performed:	May	0%
	Time Elapsed	2.8%
	Work Completed	0%
Contractor Earnings:	May	\$0
	Previous	\$0
	Total to Date	\$0

Area Office Project Management

Project Manager: Bill Vanderwaal, MPCO-122 and Hank Herrington

No invoices were received this period.

Office Engineering

Contract Administrator: Matthew Bryne, MPCO-255

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: Daniel Pavone, MPCO-333

Number of Contract Employees: 8

Work performed:

The contractor worked on installing the orange fence to mark the Limit of Disturbance, and worked on weed control by removing the Wild Mustard and Wild Radish from within the Limit of Disturbance.

Subcontractor, Meyers, mobilized two pieces of equipment to the construction site and tried unsuccessfully to locate the water line that will supply water to the site.

Contract No. R10PC20R33

Specification No. 20-C0752

Red Bluff Pumping Plant and Fish Screen–Sacramento River Division–Sacramento Canals Unit–  
Central Valley Project, California

Balfour Beatty Infrastructure, Inc., Red Bluff, CA

Work Performed:	May	0%
	Time Elapsed	87.2%
	Work Completed	93.9%

Contractor Earnings:	May	\$0
	Previous	\$70,139,777.93
	Total to Date	\$71,545,081.39

Area Office Project Management

Project Manager: Bill Vanderwaal

Office Engineering

Contract Administrator: Kevin Jacobs, MPCO-214

Invoice 21 was received and forwarded to the Denver finance office for processing. It was not for work done this period but for work done through April 28, 2012.

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: Dave Derk, MPCO-334 and Luke Smith, MPCO-309

Number of Contract Employees: 90 employees were on site.

Work Performed:

Pacific Gas and Electric completed the check list for the switchyard relay and power equipment on May 21 and all tests went well.

Balfour Beatty Infrastructure, Inc. had 18 employees on site that performed the following work.

They continued dredge pipe work under the Red Bank Creek Bridge, completed the settling pond slide gates, and placing the low-slump backfill along the canal transition.

Fish Screen Structure: They installed and tested the sediment jetting pumps and the sediment jetting system, continued the cat walk/handrail, and removed the river sheet pile cofferdam.

Pumping Plant: They continued cleanup around the area. The contractor performed motor pump tests and operated the pumps during the night for an additional 12 hours to supply water to Tehama Colusa Canal Water Authority. The contractor started forming the concrete entrance slabs of the pump plant deck.

Canal and Canal Transition: They completed the tie back-rod ends, installing caps and grouting.

Subcontractor, Meyers Earthwork, had 5 employees on site that performed the following work.

Forebay: They completed subgrade grading and slopes along the forebay access roads, downstream and upstream arcs, and the rip rap along the ditch lines and drainage outlets.

Site work: They completed excavation for the dredge pipeline along the forebay access road from the pumping plant to the bridge. They started the gravel fill on the downstream arc between the fish screen and pumping plant.

Harris Salinas Rebar: Harris Salinas had 2 employees on site that completed the reinforcing mats for the four entrance slabs around the pumping plant deck.

Subcontractor, Central Sierra Electric, had 7 to 10 workers on site that performed the following work.

Site Work: They completed the cable trench between the pumping plant and bridge, and installed the conduit runs and pull boxes. They completed installation of conductors between the control building and siphon. Slide gates at the siphon and the flow meter are operational.

Fish Screen: They continued pulling conductors between the pumping plant equipment and fish screen equipment. They tested, terminated, and landed some of the conductors inside the fish screen cleaner control panels.

Pumping Plant: They completed installation of the wire way along and conductors between the low-voltage transformers and the 480-volt panel for the pumping plant and fish screen control panel. They completed installation of the conductors between the butterfly valves and pumping plant and between the motors and variable frequency drives. They installed and tested the auto dialer and the heating, ventilation and air conditioning conduit. They continued installation of the interior lighting and began installation of the exterior conduit outlets.

Switchyard: They assisted Pacific Gas and Electric with testing of the 69 kilovolt transformers and breakers in the switchyard.

Siphon: They installed the electrical conduits on the siphon trash rack and terminated the power and signal conductors for the slide gates operators.

Subcontractor, FD Thomas, had 4 painters on site that continued touch up work on fish screen solid panels and completed coating the roof hatches and exterior building columns.

Subcontractor, Harreld's Hi Voltage, had 2 workers on site that assisted Pacific Gas and Electric with the testing and switching of the transformers and circuit breakers, and landed all the medium voltage conductors in the variable frequency drives and motors.



Subcontractor, Corpro, had one worker on site that tested both cathodic protection systems in the pumping plant.

Subcontractor, Pacific Power Testing, had 3 workers on site that completed the testing of the medium voltage conductors between the variable frequency drives and motors.

Subcontractor, Ballard Diving and Salvage, had 4 workers on site that completed removal the sheet pile cofferdam in the Sacramento River in front of the fish screen, assisted by Balfour Beatty equipment operators.

Subcontractor, Eaton Corporation, had 5 workers on site that performed the following work:

Pumping Plant: One worker completed setup and wiring on the protective relays in the switchgear room. The others completed the set up and required tests on the variable frequency drives prior to the motor heat run tests.

Subcontractor, Tesco Controls, had 3 workers on site that made wire to wire checks on the electrical panels and computer system. They completed set up of the supervisory control and data acquisition system and the computer system. They ran tests on the system operating the variable frequency drives for the pumping plant pumps, butterfly valves, fish screen sediment jetting pumps and valves.

Subcontractor, Pisor Fence, had 4 workers on site that installed the handrail on the metal guardrail beam on the pumping plant deck.

Subcontractor, Automated Valve Services, had 2 workers on site that performed the following work:

Pumping Plant: They set and made adjustments to the 9 butterfly valve actuators on the discharge pipes, and tested the settings within the SCADA program.

Fish Screen: They set and made adjustment on the sediment jetting valve actuators.

Subcontractor, Bellingham Marine, had 4 workers on site that installed the floating dock in the forebay.

Subcontractor, Munson Pumps Services, had 4 workers on site that continued assembling sections of dredge pipe.

Subcontractor, Pacific States, had 10 workers on site that resumed the off haul of class III material and solid waste, and continued backfilling, grading, and removal of the stockpile management areas.

Subcontractor, Redline, had 1 worker on site that performed the heat run test and took readings for all nine pumps and motors.

Subcontractor, Mechanical Environmental Systems Analysis and Adjustment Agency, had 2 technicians on site that completed the testing and balancing of the heating, ventilation and air conditioning systems inside the pumping plant control building.

Subcontractor, WV Alton, had 2 technicians on site that set up the heating, ventilation and air conditioning units in the pumping plant control building.



Photo of the forebay and access road looking downstream at the pumping plant intake trash rakes

Red Bluff Pumping Plant and Fish Screen

Contract No. R10PC20R09

Specification No. 20-C0740

Red Bluff Pumping Plant and Fish Screen, Landfill Excavation and Canal, Siphon and Access  
Bridge–Sacramento River Division–Sacramento Canals Unit–Central Valley Project, California  
West Bay Builders, Red Bluff, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	95.7%

Contractor Earnings:	May	\$0
	Previous	\$22,275,999.59
	Total to Date	\$22,275,999.59

Area Office Project Management

Project Manager: Bill Vanderwaal, MPCO-122

Office Engineering

Contract Administrator: Kevin Jacobs, MPCO-214

No invoices were received this period.

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: Daniel Pavone, MPCO-333

Number of Contract Employees: 0

Work Performed:

No work was performed as site work was completed in January 2012. Substantially complete date was December 2, 2011.

Contract No. R10PC20R11

Specification No. 20-C0730

Red Bluff Pumping Plant and Fish Screen, Pumps and Motors–Sacramento River Division–

Sacramento Canals Unit–Central Valley Project, California

MWI Corporation, Deerfield Beach, FL

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	98.4%

Contractor Earnings:	May	\$0
	Previous	\$6,851,884.00
	Total to Date	\$6,851,884.00

Area Office Project Management

Project Manager: Bill Vanderwaal

Office Engineering

Contract Administrator: Kevin Jacobs, MPCO-214

This is a supply contract.

Liquidated damages are being assessed starting July 31, 2011.

No invoices were received this period.

Field Engineering

Construction Manager: Randy Wyatt

Construction Representative: None

Number of Contract Employees: Not applicable as this is a supply contract.

Work Performed:

No work was performed. All pumps have been installed.

Contract No. R12PC20053

Specification No. 20-C0789

Shasta Powerplant Control and Computer Room HVAC Replacement–Shasta Division–Central Valley Project, California

Ray-Mac Mechanical, Inc., Mt. Shasta, CA.

Work Performed:	May	0%
	Time Elapsed	35.0%
	Work Completed	0%
Contractor Earnings:	May	\$0
	Previous	\$0
	Total to Date	\$0

Area Office Project Management

Project Manager: Jeff Gifford, NC-221

Office Engineering

Contract Administrator: Ryan Hennigan, MPCO-214

Notice to Proceed date: April 26, 2012

No invoices were received this period.

The contractor is preparing a value engineering proposal to modify the heating, ventilation, and air conditioning systems.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: Frank Medberry, MPCO-341

Number of Contract Employees:

Work performed:

On site work has not begun.

Contract No. R10PC20102  
Specification No. 20-C0755  
Spring Creek Powerplant Generators G1 and G2 Rewinds–NCAO–Central Valley Project,  
California  
Andritz Hydro Corp., Charlotte, NC

Work Performed:	May	10.6%
	Time Elapsed	100%
	Work Completed	66.0%
Contractor Earnings:	May	\$1,209,720.00
	Previous	\$6,293,020.65
	Total to Date	\$7,502,740.65

Area Office Project Management  
Project Manager: Joe Ascoli, NC-650

Office Engineering  
Contract Administrator: Kevin Jacobs, MPCO-214

Invoice 4 was received and forwarded to the Denver finance office for processing.

A modification is in the works to change the outage schedule and change the contract completion date from May 2, 2012, to June 28, 2013.

Field Engineering  
Construction Manager: Steve Holmes, MPCO-320  
Construction Representative: Frank Medberry, MPCO-341

Number of Contract Employees: 0

Work performed:

There was no site work this period. Site work will be resumed next month.

Contract No. R12PC20044

Specification No. 20-C0774a

Station Service Switchgear Replacement–Trinity River Division–Central Valley Project,  
California

Eaton Corporation, Raleigh, NC

Work Performed:	May	0%
	Time Elapsed	15.7%
	Work Completed	0%
Contractor Earnings:	May	\$0
	Previous	\$0
	Total to Date	\$0

Area Office Project Management

Project Manager: Jeff Gifford, NC-221

Office Engineering

Contract Administrator: Ryan Hennigan, MPCO-214

Notice to Proceed date: April 2, 2012

No invoices were received this period.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: Frank Medberry, MPCO-341

Number of Contract Employees:

Work performed:

On site work has not begun. Mobilization is scheduled to begin on the first site Spring Creek Power Plant on October 16, 2012, at JF Carr Power Plant on December 20, 2012, and at Trinity Power Plant on February 6, 2012.

Contract No. R10PC20185

Specification No. 20-C0762

Whiskeytown Lake Temperature Control Curtain–Trinity River Division–Central Valley Project,  
California

Erick Ammon, Inc., Anderson, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	100%
Contractor Earnings:	May	\$0
	Previous	\$2,992,214.00
	Total to Date	\$3,113,334.00

Area Office Project Management

Project Manager: Bob Gee, NC-230

Office Engineering

Contract Administrator: John Zimmerman, MPCO-230

Invoice 9-Final was received and forwarded the Denver finance office for processing. It was not for work done this period but for work done through March 31, 2012.

The final Modification (3) was executed incorporating 8 extra dive days and extending the contract completion time to June 17, 2012.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: Steve Holmes, MPCO-320

Number of Contract Employees: 0

Work performed: All site work was completed in September. The substantially complete date was June 17, 2011.



# SCCAO

Purchase Order No. R11PC20155

Specification No.20-C0776a

Delta Cross Channel Gate Control and Lighting Improvements–Central Valley Project,  
California

Sierra Range Construction, Visalia, CA

Work Performed:	May	19.1%
	Time Elapsed	100%
	Work Completed	88.7%
Contractor Earnings:	May	\$24,222.84
	Previous	\$88,182.74
	Total to Date	\$112,405.58

Area Office Project Management

Project Manager: Warren Feng, TO-438

Office Engineering

Contract Administrator: Ryan Hennigan, MPCO-211

Invoice 3 was received and forwarded to the Denver finance office for processing.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: Henry Garcia, MPCO-310

Number of Contract Employees: 4

Work performed:

Gate Control and Lighting System:

The contractor received the remote control from the manufacturer but was unable to test it because Gate 1 was broken. Next month the contractor plans to complete this item and 5 punch list items.

Contract No. R12PC20055

Specification No.20-C0776b

Delta Cross Channel Gate Hoist Wire Rope Replacement–Central Valley Project, California

Sierra Range Construction, Visalia, CA

Work Performed:	May	90.0%
	Time Elapsed	94.9%
	Work Completed	90.0%

Contractor Earnings:	May	\$90,429.73
	Previous	\$0
	Total to Date	\$90,429.73

Area Office Project Management

Project Manager: Yow-min (David) Tsao, TO-435

Office Engineering

Contract Administrator: Ryan Hennigan, MPCO-211

Invoice 1 was received and forwarded to the Denver finance office for processing.

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: John Lakovich, MPCO-310

Number of Contract Employees: 17

Work Performed:

This month the contractor completed the field portion of contract from May 7 through 11. This consisted of removal of the 4 existing gate hoist wire ropes and installation and testing of new wire ropes. The contractor completed the testing of the wire ropes by raising and lowering the gates 4 times on May 11<sup>th</sup>.

Contract No. R10PC80R23

Specification No. 20-C0761

Delta-Mendota Canal–California Aqueduct Intertie–Central Valley Project–California

Shimmick Construction Company, Inc., Tracy, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	99.3%
Contractor Earnings:	May	\$0
	Previous	\$14,908,945.87
	Total to Date	\$15,080,969.87

Area Office Project Management

Project Manager: Erika Kegel, MP-730

Office Engineering

Contract Administrator: Ryan Hennigan, MPCO-211

Invoice 18 was received and forwarded to the Denver finance office for processing. It was not for work done this period but for work done through March 25, 2012.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: Phil Vanderwal, MPCO-322

Number of Contract Employees: 4

Work performed:

A summary of the work performed follows:

- Nameplates were applied to HVAC equipment.
- Troubleshooting was performed on dampers and damper limit switches.
- During pump testing, some problems arose with motor control: (1) the control relay CR-1 on Unit 1 failed to shut off the motor on one occasion, (2) a time-out occurred on two occasions during the Unit 2 start sequence, presumably due to a faulty limit switch on the discharge valve, and (3) when closing the main shut-off switches on each motor starter prior to pumping, “Unit 5 Pump Lockout” light does not come on as the others do.
- During testing of reverse flow, it was discovered that air will enter the pipeline, causing the flowmeter to fail, if the California Aqueduct level falls below El. 240.
- A transfer inspection was held per Reclamation Manual – Directives and Standards, with representatives of the Tracy Operations and Maintenance office, the San Luis Delta-Mendota Water Authority (SLDMWA), and the California Department of Water Resources in attendance.
- SLDMWA installed 6” rock below the gooseneck vents to absorb water blown out during pump startup.

- Doors were adjusted and an incorrect lockset was replaced.
- Testing of cathodic protection continued.
- The heating, ventilation, and air conditioning sequence of operation was reprogrammed to meet specification.
- The completion ceremony was held.
- SLDMWA continued pumping and reverse flow testing.
- Insulation and a vent were added to the control room.
- Investigation determined that the automatic transfer switch needs to be programmed not to transfer when a fire alarm trips the 5 kilovolt breaker. Programming has yet to be done.
- Investigation determined that the under-voltage beacons do not time out as required; the problem persists.
- New settings were applied to the vibration monitor.
- Alarm and lockout set-points were lowered on the vibration monitor.
- Spare parts were checked in.
- The 108" pipe repair was monitored for leakage and has remained dry.
- SLDMWA began work on the supervisory control and data acquisition system.



The intertie structure–Delta-Mendota Canal–California Aqueduct Intertie

Contract No. R10PC20R32

Specification No. 20-C0749

Fish Screen Structure Phase 3, Contra Costa Canal–Central Valley Project, California

Flatiron West, Inc., Oakley, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	99.4%

Contractor Earnings:	May	\$0
	Previous	\$13,935,225.66
	Total to Date	\$13,935,225.66

Area Office Project Management

Project Manager: John Dealy, TO-406

Office Engineering

Contract Administrator: Larry Bowman, MPCO-240

Field Engineering

Construction Manager: Henry Garcia, MPCO-310

Construction Representative: John Lakovich

Number of Contract Employees: 3

Work performed:

Number of Contract Employees: 3

Work performed:

The contractor worked a day on punch list items and worked a day on performance warranty items this period

Contract No. R11PC20185

Specification No. 20-C0778

Tracy 13.8kV Switchgear/Breaker Replacement–Tracy Pumping Plant and Substation–Central Valley Project, California

Contra Costa Electric Corp., Martinez, CA

Work Performed:	May	0%
	Time Elapsed	18.1%
	Work Completed	7.4%
Contractor Earnings:	May	\$0
	Previous	\$854,892.15
	Total to Date	\$854,892.15

Area Office Project Management

Project Manager: Warren Feng, TO-438

Office Engineering

Contract Administrator: Amber Pierce, MPCO-205

This is a design build contract.

No invoices were received this period.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: Not yet determined.

Number of Contract Employees: 0

Work performed: No site work was done. The contractor has not yet mobilized to the site.

# Regional



Contract No. R10PC20R80

Specification No. 20-C0759

Drought Relief–Construction of New Wells–ARRA Project No. 28.002–California

Layne Christensen Company, Fontana, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	74.6%

Contractor Earnings:	May	\$0
	Previous	\$11,393.882.95
	Total to Date	\$12,090,550.34

Area Office Project Management

Project Manager: Kevin Clancy, MP-410

Office Engineering

Contract Administrator: Laurie Larson, MPCO-222

Invoice 11 was received and forwarded to the Denver finance office for processing. It was not for work done this period but for work done through January 2012.

Field Engineering

Construction Manager: John E. Nelson, MPCO-328

Construction Representative: Quint I. McCabe, MPCO-304

Modification executed February 23, 2012 that extended the contract until June 30, 2012.

Number of Contract Employees: 3

Work performed:

SLWD Well 47 Install Conductor/Sanitary Seal, Drill Well Shaft, Install Screen, Casing, Sounding Tube, Gravel Pack & Swab/Airlift the Casing,

SLWD Well 43 Construct Concrete Foundations, Install Electrical Conduit, & Strip Forms from the Foundations

DPWD Well 64 & 86 Perform Four Hour Startup Servicing and Field-Testing/Monitoring

DPWD Well 96 Tie in Electrical Conduit from the Control Cabinet to the Power Supply Pole

DPWD Well 38 Tie in Electrical Conduit from the Control Cabinet to the Power Supply Pole & Pull Wire, Perform Four Hour Startup Servicing and Field-Testing/Monitoring

DPWD Well 50a Drill Well Shaft, Install Screen, Casing, Sounding Tube, Gravel Pack & Swab/Airlift the Casing

BBID Well 5 Rewire Electrical Top Out, & Perform Four Hour Startup Servicing and Field-Testing/Monitoring

Purchase Order No. R10PX20R45

Specification No. 20-C0750

Drought Relief, Well Enhancements—ARRA Project No. 28.000—Central Valley Project  
California

Hydro Resources—West, Inc., Winnemucca, NV

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	43.9%
Contractor Earnings:	May	\$0
	Previous	\$555,369.60
	Total to Date	\$555,369.60

Area Office Project Management

Project Manager: Kevin Clancy, MP-410

Office Engineering

Contract Administrator: Ryan Hennigan, MPCO-211

No invoices were received this period.

Field Engineering

Construction Manager: John Nelson, MPCO-328

Construction Representative: Mike McCarty, MPCO-308

Number of Contract Employees: 2

Work performed:

The contractor completed all site work this period by installing and testing Pump 1.16.

Purchase Order No. R10PX20R54

Specification No. 20-C0750

Drought Relief, Well Enhancements–ARRA Project No. 28.000–Central Valley Project Don  
Pedro Pump, LLC–Turlock, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	86.5%

Contractor Earnings:	May	\$0
	Previous	\$1,084,249.60
	Total to Date	\$1,084,249.60

Area Office Project Management

Project Manager: Kevin Clancy, MP-410

Office Engineering

Contract Administrator: Ryan Hennigan, MPCO-211

No invoices were received this period.

Field Engineering

Construction Manager: John Nelson, MPCO-328

Construction Representative: Mike McCarty, MPCO-308

Number of Contract Employees: 0

Work performed:

No work was performed. Contractor is waiting for Pacific Gas and Electric to provide power.

Contract No. R10PC20R48

Specification No. 20-C0741

Gray Lodge Wildlife Area and Pixley National Wildlife Refuge Wetlands–Groundwater Well  
Construction–ARRA Project No. 28.113–Central Valley Project–East Side Division, California  
Sansone Company, Inc., San Luis Obispo, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	97.0%
Contractor Earnings:	May	\$0
	Previous	\$4,791,270.59
	Total to Date	\$4,791,270.59

Area Office Project Management

Project Manager: Sonya Nechanicky, MP-410

Office Engineering

Contract Administrator: Laurie Larson, MPCO-222

We are dealing with issues with the contractor regarding coatings, Pacific Gas and Electric, and equipment.

Field Engineering

Construction Manager: John E. Nelson, MPCO-328

Construction Representative: Richard T. Nead, MPCO-342

Number of Contract Employees: 0

Work performed:

Pixley

No on site construction activities this month, both PX-1 and PX-2 are complete and a field substantially complete has been drafted. Wells are not operable due to nonfunctioning float switches and erosion problems at alfalfa valve structures which are design issues and the contractor has fulfilled all his contractual responsibilities.

Gray Lodge

Field pump test:

Maggiore Bros. Drilling: Complete field pump testing on wells 2, 3, and 4 but experienced noise and vibration issues during the pre-testing and testing of pump 3 which have not yet been resolved. A field substantial complete has been drafted for GL-2 and GL-4 however the pumps are inoperable as the nonfunctioning float switches have been removed leaving no low pumping level pump and motor protection.

Contract No. R10PC20R42

Specification No. 20-C0746

Hydropower Facility Modifications-Stage 1–Battle Creek Salmon and Steelhead Restoration Project, California

RTA Construction/Ray Toney JV, Redding, CA

Work Performed:	May	0%
	Time Elapsed	74.6%
	Work Completed	55.6%
Contractor Earnings:	May	\$0
	Previous	\$4,242,245.89
	Total to Date	\$4,406,467.64

Area Office Project Management

Project Manager: Mary Marshall, MP-203

Office Engineering

Contract Administrator: Kent Perkes, MPCO-225

Invoice 16 was received and forwarded to the Denver finance office for processing. It was not done for work this period but was for work through April 30, 2012.

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: John Pospishil, MPCO-321

Number of Contract Employees: 27

Work performed:

Penstock bypass pipeline: The contractor finished placing the 66-inch reinforced concrete pipe starting with pipe section 254 and ending at pipe section 309. The contractor continued constructing permanent spoil piles in contractor Use Area 4.

Penstock bypass chute: Subcontractor, Muse Concrete, placed Chute Slabs 15 through 18 and Walls 13 through 18, and 25 and 26. Subcontractor, Camblin Steel, installed reinforcing prior to concrete placements. Bypass chute wing walls were also completed. The contractor finished placing backfill concrete for the animal crossing at station 53+52.75.

Mount Lassen Trout Farm pipe: The contractor completed the temporary diversion for the Mount Lassen trout Farm pipe.

Rock screen: Subcontractor, Schnetzer Engineering, completed screening 3-inch minus material for backfill and demobilized.

A Road: The contractor installed the double 36" corrugated metal pipe culverts for A Road at station 13+50.

Contract No. R10PC20005

Specification No. 20-C0717

North Fork Screens and Ladders–Battle Creek Salmon and Steelhead Restoration Project,  
California

Syblon Reid Contractors, Folsom, CA

Work Performed:	May	0%
	Time Elapsed	98.6%
	Work Completed	97.1%
Contractor Earnings:	May	\$0
	Previous	\$11,912,247.39
	Total to Date	\$11,912,247.39

Area Office Project Management

Project Manager: Mary Marshall, MP-203

Office Engineering

Contract Administrator: Kent Perkes, MPCO-225

The only thing remaining for the contractor to perform is to gain approval of a few final submittals including as-built drawings.

No invoices were received this period.

Field Engineering

Construction Manager: Randy Wyatt, MPCO-305

Construction Representative: John Pospishil, MPCO-321

Number of Contract Employees: 0

Work performed: The contractor completed all contract site work in December 2011, and demobilized its field office.

Contract No. R10PC20R39

Specification No. 20-C0744

Volta Wasteway Refuge Level 2 Diversification Phase I Project—ARRA Project No. 28.129—

Central Valley Project, California

Sansone Company Inc., San Luis Obispo, CA

Work Performed:	May	0%
	Time Elapsed	100%
	Work Completed	99.5%
Contractor Earnings:	May	\$0
	Previous	\$1,704,452.80
	Total to Date	\$1,704,452.80

Area Office Project Management

Project Manager: Linda Colella, MP-410

Office Engineering

Contract Administrator: Laurie Larson, MPCO-222

No invoices were received this period.

All submittals complete, contractor is submitting final REA.

The substantially complete date was August 12, 2011.

Field Engineering

Construction Manager: Steve Holmes, MPCO-320

Construction Representative: John Nelson, MPCO-328

Number of Contract Employees: 0

Work performed:

No on site work was performed as all site work has been completed.

# Contracts in Warranty Status



## Office Engineering

Contract Administrator: Amber Pierce, MPCO-205

### R11PC20051 No Spec. No. Coleman Intakes - Leaky Concrete Pipe Joint Repair

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed. (1-year warranty expired May 5, 2012).

Contract Administrator: John Zimmerman MPCO-230

### R09PC20017 20-C0708 Marble Bluff Fish Handling Building Reroofing

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (5-year roof guarantee extends to March 5, 2015).

### R09PC20147 20-C0758 New Melones Lake Restroom Building Reroofing

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (3-year roof guarantee extends to May 20, 2014).

### R10PC20176 20-C0713 New Melones Resource Area Building Reroofing

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (3-year roof guarantee extends to March 25, 2013).

### R10PC20032 20-C0737 New Melones Powerplant Emergency Engine Generator

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (1-year warranty extended to May 26, 2012).

Contract Administrator: Ryan Hennigan MPCO-211

### R11PC20087 Coleman National Fish Hatchery, Water Intake No. 3 Repairs to Fish Screen

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (1-year warranty extends to July 13, 2012).

Contract Administrator: Madelyn Giles MPCO-210

### R09PC20R03 20-C0677 Transformer K1A and K2A Replacements, Folsom Power

There was no Office Engineering Administrative activity this period.

This contract has not been contractually closed (5-year warranty for K1A extends to January 30, 2016, and that for K2A extends to January 4, 2017).

06/06/2012

U.S. Bureau of Reclamation  
SUMMARY OF FIELD AND LABORATORY TESTS OF COMPACTED FILL  
CONTROLLED BY THE LABORATORY COMPACTION METHOD

Page 1

PROJECT: Battle Creek

SPECIFICATION REQUIREMENTS:

PERIOD OF REPORT: 05/01/2012 - 05/31/2012

FEATURE: Hydropower Facility Mods Stage 1

Min percent compaction (D-Value): 95.00 %  
Min average D-Value for ALL tests: 95.00 %

SPECIFICATION NO: 20-CO746

Max DRY Wo-Wf: 2.00  
Max WET Wo-Wf: -2.00

FILL NAME: 2 - Structural Backfill

TEST NUMBER				LOCATION				FIELD DENSITY TESTS								LABORATORY VALUES					COMPACTION CONTROL VALUES					VISUAL SOIL CLASS	OTHER TESTS	REMARKS				
M O N T H Y E A R	S E C T I O N	S T A T I O N	B E A R I N G	OFF SET	ELEV	METH	USBR	WET TOT	MOIS TOT	SPEC GRAV			COMP METH	MAX DRY (PCF)	OPT MOIS (pcf)	DEG OF SAT (%)	TEST	COMP CYL (PCF)	MAX DRY (PCF)	MOIS (pcf)	DEG OF SAT (%)	Wo-Wf (%)	C (%)	D (%)	PENE NEED (PSI)							
										COMP	METH	MAT																	MAT	#3/4 (%)	+3/4 (%)	-3/4 (%)
05-01-A-01-R-A	1	17+38	CL	1348	SR	7205	128.4	18.9	23.5	2.44	2.60	100.4	22.7	96	R	122.9	100.2	22.8	96	0.1	100.2	100.2	NA	(GC)S	N							
05-07-A-01-R-A	1	17+50	CL	1348	SF	7205	127.4	14.6	9.3	2.51	2.60	108.2	15.7	82	R	123.4	107.3	17.2	87	1.5	101.4	100.8	NA	(GC)S	N							
05-07-A-02-R-A	1	17+50	CL	1348	SF	7205	124.9	13.0	16.9	2.54	2.60	104.7	14.8	70	R	121.6	107.8	16.7	86	1.9	98.8	97.1	NA	(GC)S	N							
ACCEPTED TESTS THIS PERIOD: 3						AVG.	126.9	15.5	16.6	2.50	2.60	104.4	17.7	83		122.6	105.1	18.9	90	1.2	100.1	99.4										
						S.D.	1.8	3.1	7.1	0.05	0.00	3.9	4.3	13		0.9	4.3	3.4	5	0.9	1.3	2.0										
						C.O.V.	1.4	19.7	42.9	2.06	0.00	3.7	24.4	16		0.8	4.0	17.9	6	81.0	1.3	2.0										

06/06/2012

U.S. Bureau of Reclamation  
STATISTICAL SUMMARY OF FIELD AND LABORATORY TESTS OF COMPACTED FILL  
CONTROLLED BY THE LABORATORY COMPACTION METHOD

Page 2

PROJECT: Battle Creek

SPECIFICATION REQUIREMENTS:

PERIOD OF REPORT: 05/01/2012 - 05/31/2012

FEATURE: Hydropower Facility Mods Stage 1

Min percent compaction (D-Value): 95.00 %  
Min average D-Value for ALL tests: 95.00 %  
Max DRY Wo-Wf: 2.00  
Max WET Wo-Wf: -2.00

SPECIFICATION NO: 20-CO746

FILL NAME: 2 - Structural Backfill

	This Period	To Date
No. of Tests Taken	3	31
No. of Tests Accepted	3	29
No. of Tests Rejected	0	2
No. of Rejected Tests not Re-Checked	0	2
Average Water Content Total Material	15.5	11.3
Average Control Fraction Water Content	17.7	15.0
Average Optimum Water Content	18.9	16.6
Average Wo-Wf	1.2	1.6
Percent of Accepted Tests Dryer Than 2.00	0.0	27.6
Percent of Accepted Tests Wetter Than -2.00	0.0	0.0
Average Wet Density Total Material (PCF)	126.9	135.2
Average Control Fraction Dry Density (PCF)	104.4	110.0
Average Proctor Max Dry Density (PCF)	105.1	111.9
Average Compaction Cylinder Wet Density (PCF)	122.6	126.4
Average Percent #3/4 Material (%)	16.6	31.8
Average C-Value (%)	100.1	99.9
Average D-Value (%)	99.4	98.3
Percent Accepted with D-Value < 95.0	0.0	13.8
Tests Accepted Outside of Specification Limits	0	12
Minimum D-Value of 95.0 %	0	4
Max DRY Wo-Wf of 2.00	0	8



06/06/2012

U.S. Bureau of Reclamation  
Aggregate Gradation Summary

Page 1

From 05/01/2012 to 05/31/2012

Specification : 20-C0746  
 Mix Number : ALL Combined for This Specification  
 Project : Battle Creek  
 Feature : Hydropower Facility Modifications Stage 1

Sand Gradations (ASTM)

Date	Percent Passing							% -200	FINE MOD	Moist %	Spec Grav	Absorp
	No. 3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100					
Spec Max %	100.0	100.0	100.0	85.0	60.0	30.0	10.0					
Spec Min %	100.0	95.0	80.0	50.0	25.0	10.0	2.0					
05/04/2012	100.0	99.7	81.0	54.2	27.5	9.8	3.8	2.60	3.24	4.50	2.60	3.00
05/05/2012	100.0	99.7	81.0	54.2	27.5	9.8	3.8	2.60	3.24	4.50	2.60	3.00
05/09/2012	100.0	99.8	82.0	54.1	27.2	9.5	3.5	2.40	3.24	2.50	2.60	3.10
05/11/2012	100.0	100.0	82.3	54.2	27.2	9.9	3.9	2.70	3.23	2.50	2.60	2.20
	100.0	100.0	82.3	54.2	27.2	9.9	3.9	2.70	3.23	2.50	2.60	2.20
05/18/2012	100.0	98.7	82.1	55.5	28.5	10.3	3.7	2.60	3.21	3.50	2.60	2.20
	100.0	98.7	82.1	55.5	28.5	10.3	3.7	2.60	3.21	3.50	2.60	2.20
	100.0	98.7	82.1	55.5	28.5	10.3	3.7	2.60	3.21	3.50	2.60	2.20
05/24/2012	100.0	99.8	84.1	59.1	32.2	13.1	5.0	3.30	3.07	3.50	2.60	2.20
05/30/2012	100.0	99.6	83.8	57.1	30.2	10.9	3.5	2.20	3.15	2.50	2.60	2.20
05/31/2012	100.0	99.6	83.8	57.1	30.2	10.9	3.5	2.20	3.15	2.50	2.60	2.20
Average	100.0	99.5	82.4	55.5	28.6	10.4	3.8	2.59	3.20	3.23	2.60	2.43
S.D.	0.0	0.5	1.0	1.6	1.6	1.0	0.4	0.29	0.05	0.79	0.00	0.39
C.O.V.	0.0	0.5	1.3	3.0	5.7	9.5	10.9	11.38	1.69	24.36	0.00	16.07

06/06/2012

U.S. Bureau of Reclamation  
Aggregate Gradation Summary

Page 2

From 05/01/2012 to 05/31/2012

Specification : 20-C0746  
Mix Number : ALL Combined for This Specification  
Project : Battle Creek  
Feature : Hydropower Facility Modifications Stage 1

Nominal Size : #4 - 1" (ASTM)

Coarse Aggregate Gradations

Date	Percent Passing Screen Sizes in Inches or Sieve Size Shown					% -200	Moist %	Spec Grav	Absorp
	1 1/2"	1"	1/2"	#4	#8				
Spec Max %	100.0	100.0	60.0	10.0	5.0				
Spec Min %	100.0	95.0	25.0	0.0	0.0				
05/04/2012	100.0	96.3	24.8	2.6	2.1	0.30	1.00	2.54	3.10
05/05/2012	100.0	96.3	24.8	2.6	2.1	0.30	1.00	2.54	3.10
05/09/2012	100.0	100.0	42.3	0.5	0.3	1.80	1.00	2.54	3.00
05/11/2012	100.0	100.0	35.9	0.5	0.3	1.70	1.00	2.54	2.40
	100.0	100.0	35.9	0.5	0.3	1.70	1.00	2.54	2.40
05/18/2012	100.0	100.0	49.7	0.9	0.6	0.30	-2.10	2.54	2.40
	100.0	100.0	49.7	0.9	0.6	0.30	-2.10	2.54	2.40
	100.0	100.0	49.7	0.9	0.6	0.30	-2.10	2.54	2.40
05/24/2012	100.0	100.0	52.2	0.5	0.3	0.10	-1.80	2.54	2.40
05/30/2012	100.0	100.0	26.9	0.8	0.8	1.00	1.00	2.54	2.40
05/31/2012	100.0	100.0	26.9	0.8	0.8	1.00	1.00	2.54	2.40
Average	100.0	99.3	38.1	1.0	0.8	0.80	-0.10	2.54	2.58
S.D.	0.0	1.5	11.1	0.8	0.7	0.67	1.53	0.00	0.31
C.O.V.	0.0	1.5	29.2	76.1	88.2	83.29	*****	0.00	12.10



06/06/2012

U.S. Bureau of Reclamation  
Concrete Construction Data

Page 1

Concrete Class: Structural Concrete  
Report of Mixes Used From 04/01/2012 to 05/31/2012

Mix Design Number: F670AFPX7  
 Specification Number: 20-C0746  
 Project: Battle Creek  
 Feature: Hydropower Facility Modifications Stage 1

Date Time	y^3 of Conc	Percent Of Coarse Aggregate in each size						Yield Quantities per Cubic Yard										T E Cem M Eff P	Fresh Concrete Tests						Compressive Strength Of Individual Specimens (psi)					
		Sand	CA1	CA2	CA3	CA4	Pounds					Oz					Slump (ins)		UW (pcf)	W/ C+P	Air		3 Day	7 Day	28 Day	90 Day	180 Day	1 Year		
							Water	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4	AD#5					Grav Meth	Press Meter								
04/19/2012																														
07:30	39.75	49.2	100.0	0.0	0.0	0.0	263	549	103	1484	1508	0	4.1	25.5	19.4	0.0	6.6	72	3.00	144.7	0.40	1.7	3.2		2690	3680				
08:04	7.00	49.2	100.0	0.0	0.0	0.0	263	548	98	1478	1504	0	4.1	25.7	19.0	0.0	7.7	73	2.75	144.1	0.41	2.1	3.3		2690	3610				
																								2940	4260					
																								2740	4230					
05/05/2012																														
06:28	36.00	46.8	100.0	0.0	0.0	0.0	244	534	101	1374	1529	0	12.0	18.8	24.9	0.0	6.7	68	3.50	140.1	0.38	5.5	4.7		2550	3640				
																								2580	3500					
05/11/2012																														
07:10	20.00	45.8	100.0	0.0	0.0	0.0	269	551	98	1391	1611	0	7.2	25.7	19.5	0.0		75	1.75	145.2	0.41	1.4	3.8		3340	#####				
																								3400	#####					
05/18/2012																														
05:06	14.00	44.3	100.0	0.0	0.0	0.0	214	544	96	1336	1643	0	6.7	25.6	19.2	0.0	66	3.00	141.9	0.33	5.5	4.7		3660	#####					
																								3540	#####					
11:44	22.50	44.3	100.0	0.0	0.0	0.0	230	551	104	1334	1640	0	7.4	25.5	19.2	0.0	77	1.25	142.9	0.35	4.2	4.8		2880	#####					
																								2870	#####					
Design		47.4	100.0	0.0	0.0	0.0	280	536	95	1357	1507	0	3.1	25.2	18.9	0.0			3.00	139.8	0.44	4.0	4.0			4000				
AVG.		46.6	100.0	0.0	0.0	0.0	247	546	100	1400	1573	0	6.9	24.5	20.2	0.0	7.0	72	2.54	143.2	0.38	3.4	4.1		2990	3820				
S.D.		2.2	0.0	0.0	0.0	0.0	22	6	3	67	66	0	2.9	2.8	2.3	0.0	0.6	4	0.86	1.9	0.03	1.9	0.7		390	335				
C.O.V		4.8	0.0	0.0	0.0	0.0	8.8	1.2	3.2	4.8	4.2	0.0	41.9	11.3	11.4	0.0	8.9	5.8	33.7	1.3	8.6	55.7	18.2		13.1	8.8				

Bureau.....: Required average strength = -7646 psi at 28 days. Based on 90% exceeding the design strength of 4000 psi &amp; C.O.V. (n=46) = \*\*.\*

ACI.....: Required average strength = 18813 psi at 28 days (n=46)

CURE METHOD...: Water Tank with an Average Cure Temperature of 60 - 80 (F)

##### = Specimen not broken as of report date.



06/06/2012

U.S. Bureau of Reclamation  
Concrete Construction Data

Page 2

Concrete Class: Structural Concrete  
Report of Mixes Used From 04/01/2012 to 05/31/2012

Mix Design Number: F670GFPW8  
 Specification Number: 20-C0746  
 Project: Battle Creek  
 Feature: Hydropower Facility Modifications Stage 1

		Fresh Concrete Tests														Compressive Strength Of Individual Specimens (psi)													
Date Time	y^3 of Conc	Percent Of Coarse Aggregate in each size				Yield Quantities per Cubic Yard										T E M P	Air					3 Day	7 Day	28 Day	90 Day	180 Day	1 Year		
		Sand	CA1	CA2	CA3	CA4	Water	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4		AD#5	Cem Eff	Slump (ins)	UW (pcf)	W/ C+P							Grav Meth	Press Meter
04/30/2012																													
07:22	28.00	49.5	100.0	0.0	0.0	0.0	246	523	95	1450	1500	0	9.8	49.5	43.5	0.0	6.6	75	3.00	141.2	0.40	4.4	4.5		2510	3410			
																								2580	3450				
05/04/2012																													
12:43	10.00	47.0	100.0	0.0	0.0	0.0	277	522	100	1394	1533	0	10.3	48.4	43.4	0.0	5.7	76	3.25	141.7	0.45	3.2	4.6		2320	2920			
																								2370	3040				
05/09/2012																													
06:25	16.50	46.2	100.0	0.0	0.0	0.0	260	522	95	1372	1561	0	8.8	49.1	24.8	0.0	7.8	73	3.25	141.1	0.42	4.2	5.7		3080	4030			
																								3130	4120				
05/11/2012																													
09:20	10.50	46.0	100.0	0.0	0.0	0.0	257	528	96	1383	1584	0	6.7	49.5	25.7	0.0		77	3.00	142.5	0.41	3.4	5.4		3150	#####			
																								3250	#####				
05/18/2012																													
06:33	15.00	44.6	100.0	0.0	0.0	0.0	226	526	93	1350	1637	0	6.7	49.4	24.7	0.0		66	3.50	141.9	0.37	5.0	5.5		3400	#####			
																								3520	#####				
05/24/2012																													
08:41	13.25	45.1	100.0	0.0	0.0	0.0	246	529	94	1362	1621	0	6.5	50.1	24.5	0.0		75	3.00	142.7	0.39	3.7	4.4		4030	#####			
																								3870	#####				
05/30/2012																													
06:13	16.00	46.0	100.0	0.0	0.0	0.0	275	517	91	1350	1550	0	6.1	48.5	30.3	0.0		75	3.25	140.1	0.45	4.2	5.6		3020	#####			
																								3080	#####				
05/31/2012																													
05:39	12.00	45.9	100.0	0.0	0.0	0.0	259	533	95	1389	1598	0	6.3	50.3	31.4	0.0		71	3.75	143.5	0.41	2.8	4.5		#####	#####			
																								#####	#####				
Design		44.4	100.0	0.0	0.0	0.0	285	536	95	1267	1585	0	2.1	50.4	50.4	0.0			6.00	139.6	0.45	4.0	4.0			4000			
AVG.		46.3	100.0	0.0	0.0	0.0	256	525	95	1381	1573	0	7.6	49.3	31.0	0.0	6.7	74	3.25	141.8	0.41	3.9	5.0		3094	3495			
S.D.		1.5	0.0	0.0	0.0	0.0	17	5	3	32	46	0	1.7	0.7	8.1	0.0	1.1	4	0.27	1.1	0.03	0.7	0.6		520	495			
C.O.V		3.2	0.0	0.0	0.0	0.0	6.5	1.0	2.7	2.3	2.9	0.0	22.4	1.4	26.1	0.0	15.8	4.8	8.2	0.8	6.8	18.7	11.3		16.8	14.2			

Bureau.....: Required average strength = 4950 psi at 28 days. Based on 90% exceeding the design strength of 4000 psi &amp; C.O.V. (Est.) = 15.0

ACI.....: Required average strength = 4754 psi at 28 days (n=29)

CURE METHOD...: Water Tank with an Average Cure Temperature of 70 - 76 (F)

##### = Specimen not broken as of report date.



05/31/2012

U.S. Bureau of Reclamation  
Concrete Construction Data  
Concrete Class: Secant Pile Mix  
Report of Mixes Used From 04/01/2012 to 05/31/2012

Page 1

Mix Design Number: 1514243  
Specification Number: C0-C0754  
Project: MIAD KEY-BLOCK  
Feature: SECANT PILES

Date Time	y^3 of Conc	Percent Of				Yield Quantities per Cubic Yard										T E M P	Fresh Concrete Tests					Compressive Strength Of Individual Specimens (psi)								
		Coarse Aggregate in each size				Pounds					Oz						Slump (ins)	UW (pcf)	W/ C+P	Air		3 Day	7 Day	28 Day	90 Day	180 Day	1 Year			
		Sand	CA1	CA2	CA3	CA4	Water	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4					AD#5	Grav Meth							Press Meter		
04/02/2012 08:40	123.50	43.9	100.0	0.0	0.0	0.0	299	406	173	1349	1758	0	0.0	18.5	22.1	28.9	10.7	56	8.25	147.6	0.52	1.4	1.4		2390 2520	4290 4430				
04/04/2012 07:18	123.00	44.0	100.0	0.0	0.0	0.0	293	407	175	1358	1763	0	0.0	17.9	22.5	24.4	11.0	64	7.75	148.0	0.50	1.3	1.5		2890 2810	4490 4490				
04/13/2012 08:12	143.00	44.0	100.0	0.0	0.0	0.0	301	408	173	1356	1760	0	0.0	18.3	22.2	29.4	8.6	58	9.00	148.1	0.52	1.0	1.5		2000 2110	3440 3600				
04/16/2012 10:25	134.00	42.8	100.0	0.0	0.0	0.0	298	403	175	1324	1801	0	0.0	18.4	21.9	29.4	13.4	67	7.50	148.2	0.52	1.0	2.1		3710 3590	5590 5210				
04/17/2012 07:49	65.50	43.0	100.0	0.0	0.0	0.0	301	406	172	1333	1801	0	0.0	18.5	22.4	29.2	9.0	66	8.50	148.6	0.52	0.6	1.1		2210 2250	3620 3690				
04/18/2012 08:08	101.50	43.4	100.0	0.0	0.0	0.0	301	407	176	1342	1786	0	0.0	17.9	22.2	29.4	9.5	68	8.50	148.6	0.52	0.6	1.3		2240 2290	3900 3820				
04/19/2012 07:47	73.00	43.2	100.0	0.0	0.0	0.0	300	405	174	1337	1792	0	0.0	18.1	22.0	28.8	9.7	67	8.75	148.4	0.52	0.8	1.4		2330 2290	3920 3950				
04/20/2012 08:23	136.50	43.3	100.0	0.0	0.0	0.0	300	406	174	1335	1783	0	0.0	18.5	22.4	29.3	10.5	73	8.00	148.1	0.52	0.9	1.6		2510 2600	4240 4310				
04/23/2012 09:48	231.00	42.6	100.0	0.0	0.0	0.0	297	403	171	1300	1785	0	0.0	18.0	21.9	29.3	9.0	72	8.25	146.5	0.52	2.0	1.8		2160 2220	3590 3640				
04/24/2012 07:57	229.50	42.8	100.0	0.0	0.0	0.0	299	404	174	1308	1784	0	0.0	18.1	22.0	28.8	9.0	69	9.00	147.0	0.52	1.6	1.5		2160 2150	3550 3750				
04/25/2012 08:15	253.50	42.2	100.0	0.0	0.0	0.0	288	402	171	1294	1808	0	0.0	18.3	21.8	28.8	9.1	72	7.50	146.8	0.50	2.2	1.4		2360 2300	3710 3610				
04/26/2012 07:43	202.50	42.4	100.0	0.0	0.0	0.0	297	402	177	1295	1791	0	0.0	17.9	22.1	29.2	9.9	68	7.50	146.7	0.51	1.9	1.8		2410 2430	3860 4070				
04/27/2012 07:48	258.50	42.9	100.0	0.0	0.0	0.0	297	401	173	1305	1772	0	0.0	18.0	21.8	28.9	9.9	65	7.25	146.2	0.52	2.2	1.8		2370 2400	4110 3860				
04/30/2012 07:48	215.50	44.7	100.0	0.0	0.0	0.0	299	405	169	1367	1726	0	0.0	18.1	22.0	29.1	9.6	68	8.00	146.9	0.52	1.7	1.4		2280 2290	3850 3890				
05/01/2012 07:24	204.50	44.6	100.0	0.0	0.0	0.0	298	405	175	1364	1729	0	0.0	18.1	22.3	28.7	9.4	76	8.00	147.1	0.51	1.5	1.4		2370 2340	3830 3770				
05/02/2012 07:18	217.00	44.7	100.0	0.0	0.0	0.0	296	401	173	1363	1715	0	0.0	17.9	21.8	29.1	9.4	68	9.00	146.2	0.52	2.2	1.2		1960 2030	3780 3730				
05/03/2012 08:24	125.50	44.7	100.0	0.0	0.0	0.0	309	403	172	1360	1717	0	0.0	18.3	21.9	29.2	9.3	66	8.00	146.7	0.54	1.5	1.2		2030 2090	3630 3860				

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U.S. Bureau of Reclamation  
Concrete Construction Data

Page 2

Concrete Class: Secant Pile Mix  
Report of Mixes Used From 04/01/2012 to 05/31/2012Mix Design Number: 1514243  
Specification Number: C0-C0754  
Project: MIAD KEY-BLOCK  
Feature: SECANT PILES

Date Time	y^3 of Conc	Percent Of						Yield Quantities per Cubic Yard										T E M P Eff	Fresh Concrete Tests						Compressive Strength Of Individual Specimens (psi)						
		Coarse Aggregate in each size						Pounds					Oz						Slump (ins)	UW (pcf)	W/ C+P	Air		3 Day	7 Day	28 Day	90 Day	180 Day	1 Year		
		Sand	CA1	CA2	CA3	CA4	Water	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4	AD#5	Grav Meth					Press Meter									
05/04/2012 07:21	124.50	44.1	100.0	0.0	0.0	0.0	304	398	169	1347	1739	0	0.0	17.9	22.0	28.4	67	8.00	146.6	0.54	1.7	1.3		2030 2040	##### #####						
05/07/2012 09:32	153.00	44.7	100.0	0.0	0.0	0.0	29	40	17	134	169	0	0.0	1.8	2.1	2.3	72	9.00	14.4	0.51	90.4	1.0		2130 2040	##### #####						
05/08/2012 07:53	190.50	44.8	100.0	0.0	0.0	0.0	305	403	178	1362	1713	0	0.0	18.0	21.8	28.9	73	8.00	146.7	0.52	1.5	1.2		1360 2120	##### #####						
05/09/2012 07:42	220.50	44.7	100.0	0.0	0.0	0.0	306	403	196	1357	1710	0	0.0	18.0	21.8	28.9	74	8.00	147.1	0.51	1.2	1.3		2240 2200	##### #####						
05/10/2012 07:21	220.50	44.7	100.0	0.0	0.0	0.0	306	404	173	1365	1722	0	0.0	18.4	21.9	29.3	71	8.50	147.0	0.53	1.3	1.5		2140 2180	##### #####						
05/11/2012 06:59	209.00	44.7	100.0	0.0	0.0	0.0	308	405	172	1370	1727	0	0.0	17.8	22.4	28.8	65	8.00	147.5	0.53	1.1	1.0		2300 2270	##### #####						
05/14/2012 07:50	195.00	45.5	100.0	0.0	0.0	0.0	306	402	172	1392	1702	0	0.0	18.0	21.9	29.0	71	8.00	147.2	0.53	1.2	1.0		1890 1970	##### #####						
05/15/2012 07:04	231.50	46.0	100.0	0.0	0.0	0.0	307	403	171	1414	1690	0	0.0	18.1	21.9	28.7	70	8.50	147.6	0.53	0.9	1.0		1840 1890	##### #####						
05/16/2012 08:41	222.50	45.7	100.0	0.0	0.0	0.0	305	404	173	1394	1690	0	0.0	18.1	22.3	29.1	73	8.00	146.9	0.53	1.4	1.4		2120 1900	##### #####						
Design		42.0	100.0	0.0	0.0	0.0	309	395	169	1276	1750	0	0.0	18.0	22.0	24.0		8.00	144.4	0.55	3.0	3.0			3000						
AVG.		44.0	100.0	0.0	0.0	0.0	290	390	168	1301	1690	0	0.0	17.5	21.3	27.8	9.8	68	8.18	142.2	0.52	4.8	1.4		2264	3973					
S.D.		1.1	0.0	0.0	0.0	0.0	54	71	31	240	312	0	0.0	3.2	3.9	5.3	1.1	5	0.50	26.1	0.01	17.5	0.3		371	457					
C.O.V		2.4	0.0	0.0	0.0	0.0	18.4	18.3	18.6	18.4	18.5	0.0	0.0	18.4	18.4	19.0	11.5	6.8	6.1	18.3	1.9	**. *	20.0		16.4	11.5					

Bureau.....: Required average strength = 3504 psi at 28 days. Based on 90% exceeding the design strength of 3000 psi &amp; C.O.V. (n=268) = 11.2

ACI.....: Required average strength = 3569 psi at 28 days (n=268)

CURE METHOD...: Water Tank with an Average Cure Temperature of 65 - 80 (F)

##### = Specimen not broken as of report date.

05/31/2012

U.S. Bureau of Reclamation  
Aggregate Gradation Summary

Page 1

From 04/01/2012 to 05/31/2012

Specification : C0-C0754  
Mix Number : ALL Combined for This Specification  
Project : MIAD KEY-BLOCK  
Feature : SECANT PILES

## Sand Gradations (ASTM)

Date	Percent Passing							% -200	FINE MOD	Moist %	Spec Grav	Absorp
	No. 3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100					
Spec Max %	100.0	100.0	100.0	85.0	60.0	30.0	10.0					
Spec Min %	100.0	95.0	80.0	50.0	25.0	10.0	2.0					
05/01/2012	100.0	98.4	86.3	74.3	51.0	19.1	5.1	2.50	2.66	3.81	2.65	2.00
05/02/2012	100.0	98.4	86.3	74.3	51.0	19.1	5.1	2.50	2.66	3.49	2.65	2.00
05/03/2012	100.0	98.4	86.3	74.3	51.0	19.1	5.1	2.50	2.66	3.86	2.65	2.00
05/04/2012	100.0	98.4	86.3	74.3	51.0	19.1	5.1	2.50	2.66	3.75	2.65	2.00
05/07/2012	100.0	97.4	84.9	71.8	46.1	15.8	4.4	2.20	2.80	4.35	2.65	2.00
05/08/2012	100.0	97.4	84.9	71.8	46.1	15.8	4.4	2.20	2.80	3.78	2.65	2.00
05/09/2012	100.0	97.4	84.9	71.8	46.1	15.8	4.4	2.20	2.80	4.20	2.65	2.00
05/10/2012	100.0	97.4	84.9	71.8	46.1	15.8	4.4	2.20	2.80	3.40	2.65	2.00
05/11/2012	100.0	97.4	84.9	71.8	46.1	15.8	4.4	2.20	2.80	4.02	2.65	2.00
05/14/2012	100.0	98.3	85.9	72.7	50.0	19.5	5.6	2.80	2.68	3.20	2.65	2.00
05/15/2012	100.0	98.3	85.9	72.7	50.0	19.5	5.6	2.80	2.68	3.09	2.65	2.00
05/16/2012	100.0	98.3	85.9	72.7	50.0	19.5	5.6	2.80	2.68	3.13	2.65	2.00
Average	100.0	98.0	86.1	73.6	49.6	18.4	5.2	2.42	2.69	4.09	2.65	2.00
S.D.	0.0	0.4	0.8	1.4	2.2	1.5	0.5	0.20	0.06	1.08	0.00	0.00
C.O.V.	0.0	0.4	1.0	1.9	4.4	8.0	9.8	8.27	2.40	26.47	0.00	0.00

05/31/2012

U.S. Bureau of Reclamation  
Aggregate Gradation Summary

Page 2

From 04/01/2012 to 05/31/2012

Specification : C0-C0754  
Mix Number : ALL Combined for This Specification  
Project : MIAD KEY-BLOCK  
Feature : SECANT PILES

Nominal Size : #8 - 3/8" (ASTM)

Coarse Aggregate Gradations

Date	Percent Passing Screen Sizes in Inches or Sieve Size Shown					% -200	Moist %	Spec Grav	Absorp
	1/2"	3/8"	#4	#8	#16				
Spec Max %	100.0	100.0	30.0	10.0	5.0				
Spec Min %	100.0	85.0	10.0	0.0	0.0				
05/01/2012	100.0	99.0	21.7	4.6	1.1	0.80	1.50	2.70	1.40
05/02/2012	100.0	99.0	21.7	4.6	1.1	0.80	1.50	2.70	1.40
05/03/2012	100.0	99.0	21.7	4.6	1.1	0.80	2.00	2.70	1.40
05/04/2012	100.0	99.0	21.7	4.6	1.1	0.80	2.00	2.70	1.40
05/07/2012	100.0	99.4	29.4	5.4	0.7	0.40	0.25	2.70	1.40
05/08/2012	100.0	99.4	29.4	5.4	0.7	0.40	1.50	2.70	1.40
05/09/2012	100.0	99.4	29.4	5.4	0.7	0.40	1.50	2.70	1.40
05/10/2012	100.0	99.4	29.4	5.4	0.7	0.40	1.50	2.70	1.40
05/11/2012	100.0	99.4	29.4	5.4	0.7	0.40	1.50	2.70	1.40
05/14/2012	100.0	99.8	29.0	6.4	2.4	2.80	1.50	2.70	1.40
05/15/2012	100.0	99.8	29.0	6.4	2.4	0.40	1.50	2.70	1.40
05/16/2012	100.0	99.8	29.0	6.4	2.4	0.40	1.50	2.70	1.40
Average	96.2	95.4	21.4	3.8	0.8	0.55	1.51	2.70	1.40
S.D.	19.6	19.5	7.6	1.8	0.6	0.49	0.39	0.00	0.00
C.O.V.	20.4	20.4	35.5	45.7	75.2	89.26	25.86	0.00	0.00

06/04/2012

U.S. Bureau of Reclamation  
Concrete Construction Data

Page 1

Concrete Class: Controlled Low-Strength Material (CLSM)  
Report of Mixes Used From 05/01/2012 to 05/31/2012Mix Design Number: F200BMS01  
Specification Number: 20-C0752  
Project: Central Valley  
Feature: Red Bluff Pumping Plant and Fish Screen

Date Time	y^3 of Conc	Yield Quantities per Cubic Yard																Fresh Concrete Tests					Compressive Strength Of Individual Specimens (psi)											
		Percent Of Coarse Aggregate in each size						Pounds										Oz					Cem Eff	M P	Slump (ins)	UW (pcf)	Air		3 Day	7 Day	28 Day	90 Day	180 Day	1 Year
		Sand	CA1	CA2	CA3	CA4	Water	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4	AD#5	Grav Meth	Press Meter																
05/02/2012 09:52	108.00	73.8	100.0	0.0	0.0	0.0	339	91	89	2279	823	0	0.0	0.0	16.1	0.0	69	4.00	134.1	1.88	5.0	1.5					30 40							
Design		75.0	100.0	0.0	0.0	0.0	434	94	94	2253	771	0	0.0	0.0	16.9	0.0		9.00	135.0	2.31	1.0	1.0					50							
AVG.		73.8	100.0	0.0	0.0	0.0	339	91	89	2279	823	0	0.0	0.0	16.1	0.0	0.0 69	4.00	134.1	1.88	5.0	1.5					35							

Bureau.....: Required average strength = 62 psi at 7 days. Based on 90% exceeding the design strength of 50 psi & C.O.V. (Est.) = 15.0  
ACI.....: Required average strength = 60 psi at 7 days (n=28)  
CURE METHOD...: Water Tank with an Average Cure Temperature of 70 - 76 (F)

06/04/2012

U.S. Bureau of Reclamation  
Concrete Construction Data

Page 2

Concrete Class: Lean Canal Concrete  
Report of Mixes Used From 05/01/2012 to 05/31/2012

Mix Design Number: F425AFP01-2  
Specification Number: 20-C0752  
Project: Central Valley  
Feature: Red Bluff Pumping Plant and Fish Screen

Date Time	y^3 of Conc	Percent Of										Yield Quantities per Cubic Yard										T E Cem M Eff	Fresh Concrete Tests						Compressive Strength Of Individual Specimens (psi)					
		Coarse Aggregate in each size						Pounds				Oz						Slump (ins)	UW (pcf)	W/ C+P	Air		3 Day	7 Day	28 Day	90 Day	180 Day	1 Year						
		Sand	CA1	CA2	CA3	CA4	Water	Cem	Poz	Sand	C.A.	AD#3	AEA	WRA	AD#4	AD#5	Grav Meth				Press Meter													
05/29/2012 12:59	18.50	49.7	100.0	0.0	0.0	0.0	253	351	61	1624	1634	0	2.5	20.6	0.0	0.0	75	1.50	145.3	0.61	1.7	2.6	##### #####	##### #####										
Design		45.0	100.0	0.0	0.0	0.0	257	340	60	1430	1707	0	2.4	20.0	0.0	0.0		3.00	140.5	0.64	4.0	4.0			1000									
AVG.		49.7	100.0	0.0	0.0	0.0	253	351	61	1624	1634	0	2.5	20.6	0.0	0.0	0.0 75	1.50	145.3	0.61	1.7	2.6												

Bureau.....: Required average strength = 1238 psi at 28 days. Based on 90% exceeding the design strength of 1000 psi & C.O.V. (Est.) = 15.0  
ACI.....: Required average strength = 2000 psi at 28 days (n=10)  
CURE METHOD..: Fog with an Average Cure Temperature of 70 - 76 (F)

##### = Specimen not broken as of report date.





06/04/2012

U.S. Bureau of Reclamation  
SUMMARY OF FIELD AND LABORATORY TESTS OF COMPACTED FILL  
CONTROLLED BY THE LABORATORY COMPACTION METHOD

Page 1

PROJECT: Central Valley

SPECIFICATION REQUIREMENTS:

PERIOD OF REPORT: 05/01/2012 - 05/31/2012

FEATURE: Red Bluff Pumping Plant and Fish Screen

Min percent compaction (D-Value): 98.00 %

TOTAL MATERIAL PLACED: 0 Cubic Yards

SPECIFICATION NO: 20-C0740

Min average D-Value for ALL tests: 98.00 %

Max DRY Wo-Wf: 2.00

Max WET Wo-Wf: -2.00

UNITS PER ACCEPTED TEST: 0 Cubic Yards

FILL NAME: 1 - Road Embankment

TEST NUMBER				LOCATION				FIELD DENSITY TESTS								LABORATORY VALUES					COMPACTION CONTROL VALUES						
M O N T H Y E A R	S E C T I O N	T A B L E N O	S T A T I O N	E L E V A T I O N	S R	T E S T N O	W E T D E N S I T Y	M O I S T U R E	P L U S #4	M I N U S #4	D R Y D E N S I T Y	M O I S T U R E	O F S A T U R A T I O N	C O M P A C T I O N	M A X D R Y D E N S I T Y	O P T I M U M D R Y D E N S I T Y	D E G R E E O F S A T U R A T I O N	W O - W F	C	D	P E N E E D	V I S U A L S O I L C L A S S	O T H E R T E S T S	R E M A R K S			
05-17-A-01-R-A	1		204+00	45'		0	SR	7205	136.4	6.9	9.0	2.64	2.60	124.8	7.5	65	R	131.9	125.0	9.3	81	1.8	101.7	99.8	NA		N
ACCEPTED TESTS THIS PERIOD: 1								AVG.	136.4	6.9	9.0	2.64	2.60	124.8	7.5	65		131.9	125.0	9.3	81	1.8	101.7	99.8			

06/04/2012

U.S. Bureau of Reclamation  
 STATISTICAL SUMMARY OF FIELD AND LABORATORY TESTS OF COMPACTED FILL  
 CONTROLLED BY THE LABORATORY COMPACTION METHOD

Page 2

PROJECT: Central Valley  
 FEATURE: Red Bluff Pumping Plant and Fish Screen  
 SPECIFICATION NO: 20-C0740  
 FILL NAME: 1 - Road Embankment

SPECIFICATION REQUIREMENTS:  
 Min percent compaction (D-Value): 98.00 %  
 Min average D-Value for ALL tests: 98.00 %  
 Max DRY Wo-Wf: 2.00  
 Max WET Wo-Wf: -2.00

PERIOD OF REPORT: 05/01/2012 - 05/31/2012  
 TOTAL MATERIAL PLACED: 0 Cubic Yards  
 UNITS PER ACCEPTED TEST: 0 Cubic Yards

	This Period	To Date
No. of Tests Taken	1	126
No. of Tests Accepted	1	89
No. of Tests Rejected	0	37
No. of Rejected Tests not Re-Checked	0	36
Average Water Content Total Material	6.9	9.7
Average Control Fraction Water Content	7.5	10.8
Average Optimum Water Content	9.3	12.3
Average Wo-Wf	1.8	1.5
Percent of Accepted Tests Dryer Than 2.00	0.0	47.2
Percent of Accepted Tests Wetter Than -2.00	0.0	10.1
Average Wet Density Total Material (PCF)	136.4	137.7
Average Control Fraction Dry Density (PCF)	124.8	120.2
Average Proctor Max Dry Density (PCF)	125.0	120.3
Average Compaction Cylinder Wet Density (PCF)	131.9	128.8
Average Percent #4 Material (%)	9.0	15.0
Average C-Value (%)	101.7	101.8
Average D-Value (%)	99.8	98.8
Percent Accepted with D-Value < 98.0	0.0	25.8
Tests Accepted Outside of Specification Limits	0	59
Minimum D-Value of 98.0 %	0	23
Max DRY Wo-Wf of 2.00	0	42
Max WET Wo-Wf of -2.00	0	9